

FAS – Office of Global Analysis (OGA)
United States Department of Agriculture (USDA)
International Operational Agriculture Monitoring Program



February Report – Week 2

February 14th, 2009

1. The current outlook for winter grain production (wheat and barley) in MY 2009/10 in Iraq is potentially only slightly improved over last years crop, which was severely reduced owing to extreme drought conditions. Less than adequate rainfall and/or irrigation supply during the current winter season has resulted in similarly poor or worse vegetative crop conditions than last year over large regional areas. The poor crop establishment and vigor of the 2009/10 grain crop is expected to result in well below-normal grain production. Rainfall accumulations over the next few months will be critical in determining the final outlook for crop yields in Iraq, and there is still time for significant crop recovery. However, a continuation of the current dry weather pattern will impede any improvement in grain production prospects compared to last year.
1. NDVI analysis of the current winter grains season (MY 2009/10) shows slight improvement in the northern governorates when compared to the previous drought year, but overall conditions remain similarly sparse (Figure 3). When compared to a model good production year for the northern governorates (i.e. MY 2005/06), the current low productivity in the provinces of Dahuk, Arbil, and Ninawa becomes more apparent (Figure 4). The only exceptions are the provinces of As Sulaymaniyah, Salah ad Din, and At Ta'min, which show either similar or significantly higher crop vigor and abundance than previous years. The map illustrations are supported by NDVI time-series comparisons (Figures 5 & 6).
1. A similar analysis conducted on the southern irrigated governorates showed that NDVI was improved over last season, but remains low compared to a model good production year (i.e. MY 2006/07) for the southern provinces (Figure 7). Areas of concern are large regions of reduced crop vigor and abundance in Wasit, Diyala, and Al Qadisiyah. These governorates roughly contribute to 32% of wheat and 19% of total barley production. Importantly, these areas were even producing during the previous drought year. However, there are some isolated field areas of highly abundant crop cover in Diyala and Wasit compared to previous years.
1. Moderate resolution AWiFS imagery collected during February 4th, 2008 and February 5th, 2009 provided a more detailed analysis of change in crop NDVI. The large field areas of reduced crop NDVI and isolated areas of increase are defined in Figures 8 & 9.

* NDVI analysis for the remaining southern provinces will be available as the season progresses

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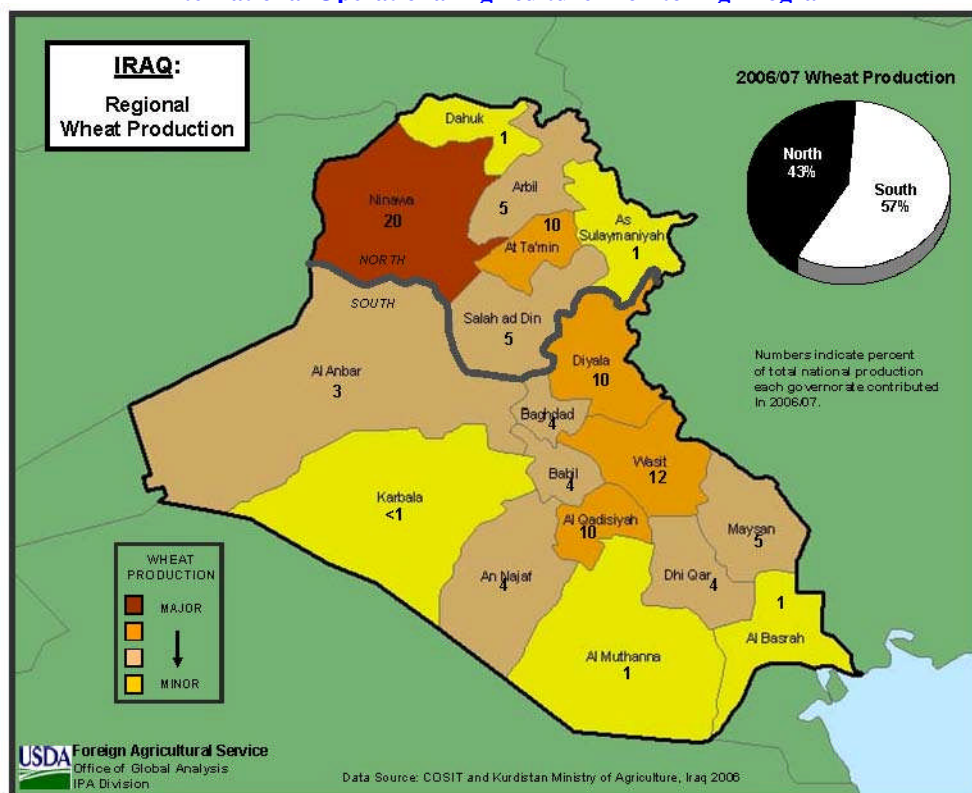


Figure 1: Wheat production during MY 2006/07.

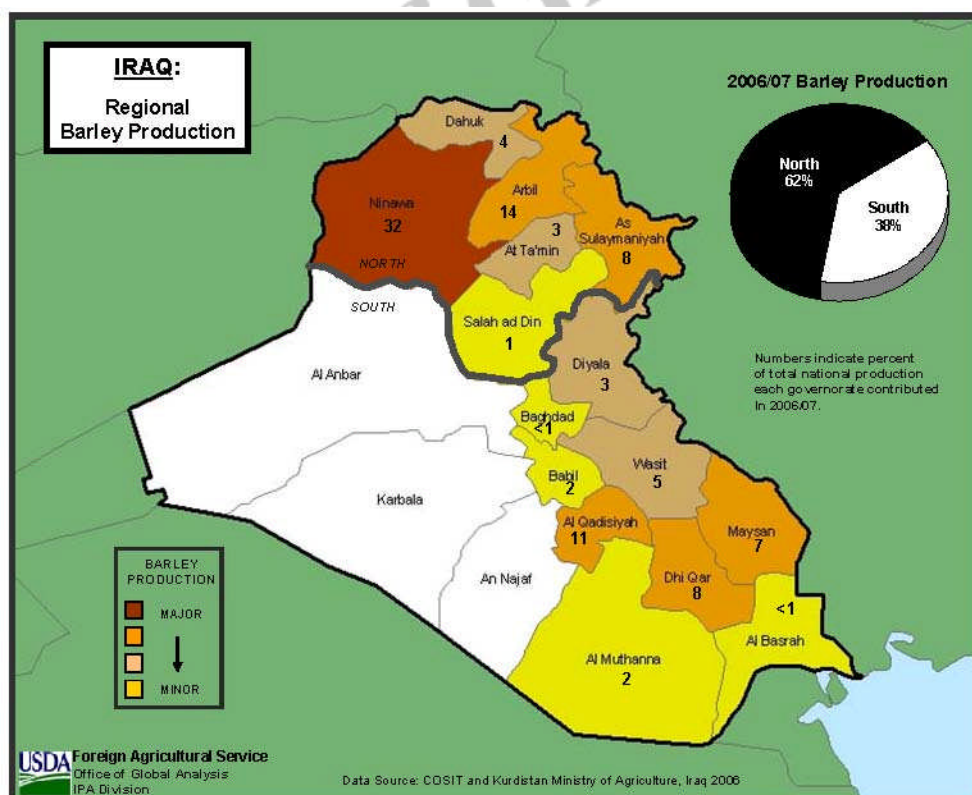


Figure 2: Barley production during MY 2006/07.

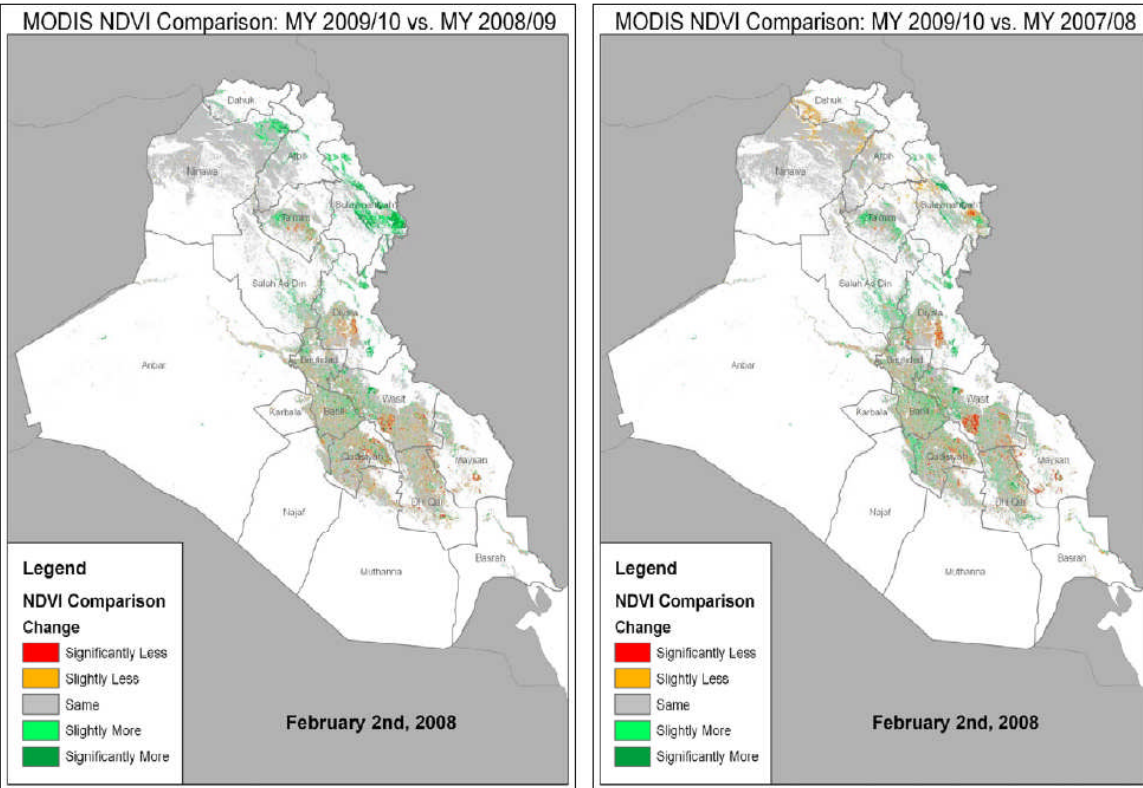


Figure 3: Comparing current season to MY 2008/09 and MY 2007/08.

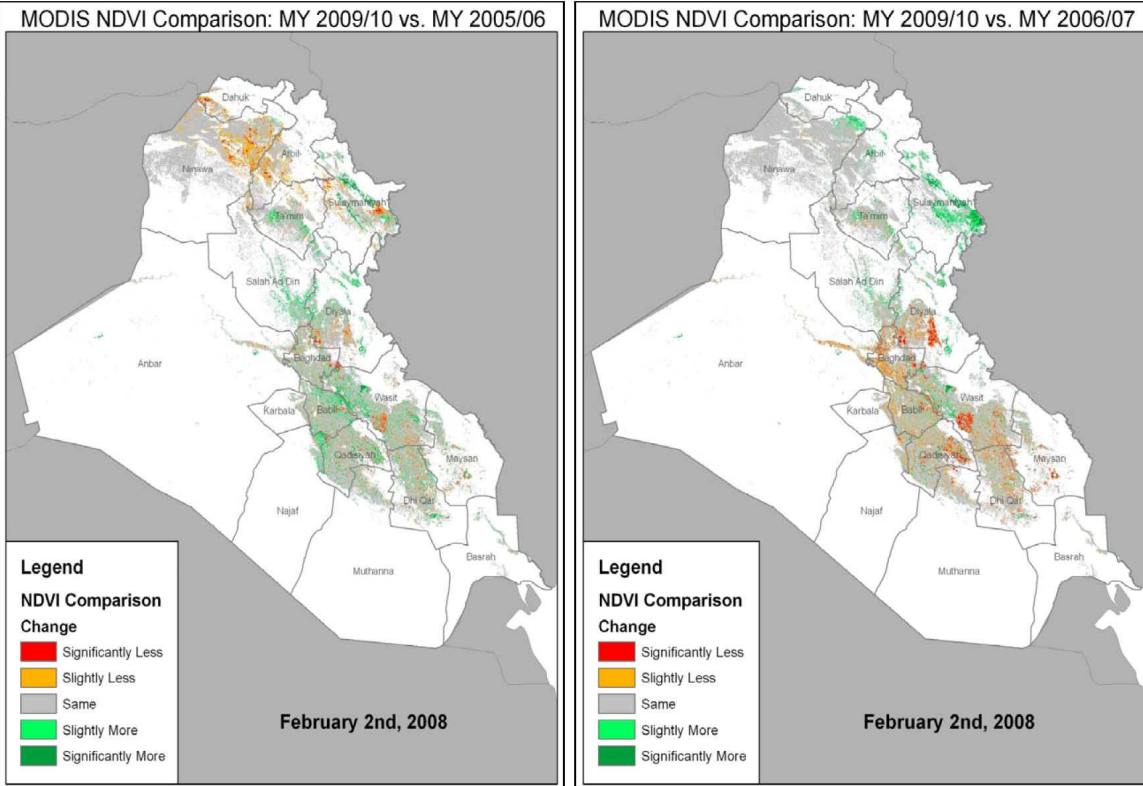


Figure 4: Comparing current season to MY 2005/07 and MY 2006/07

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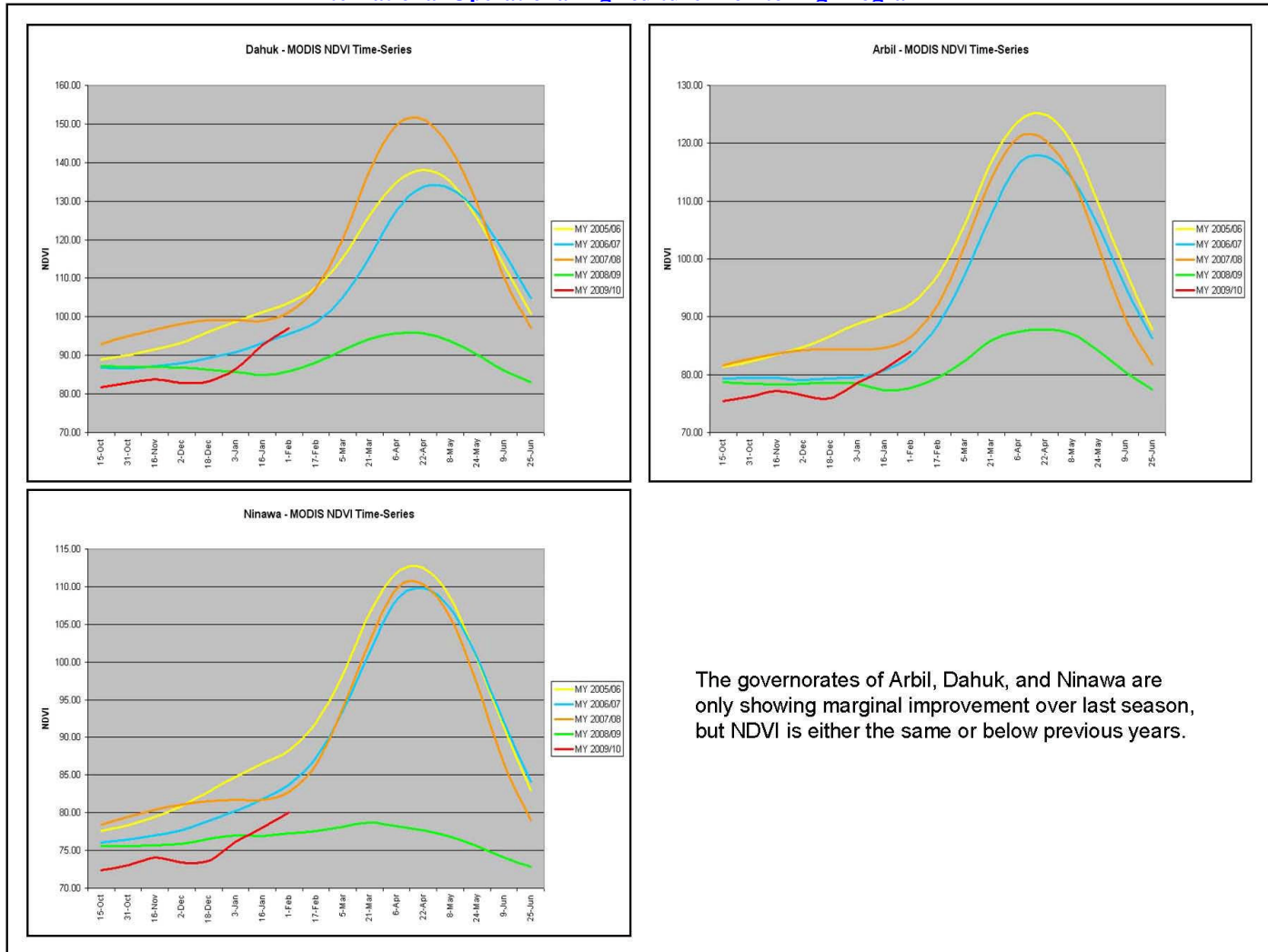
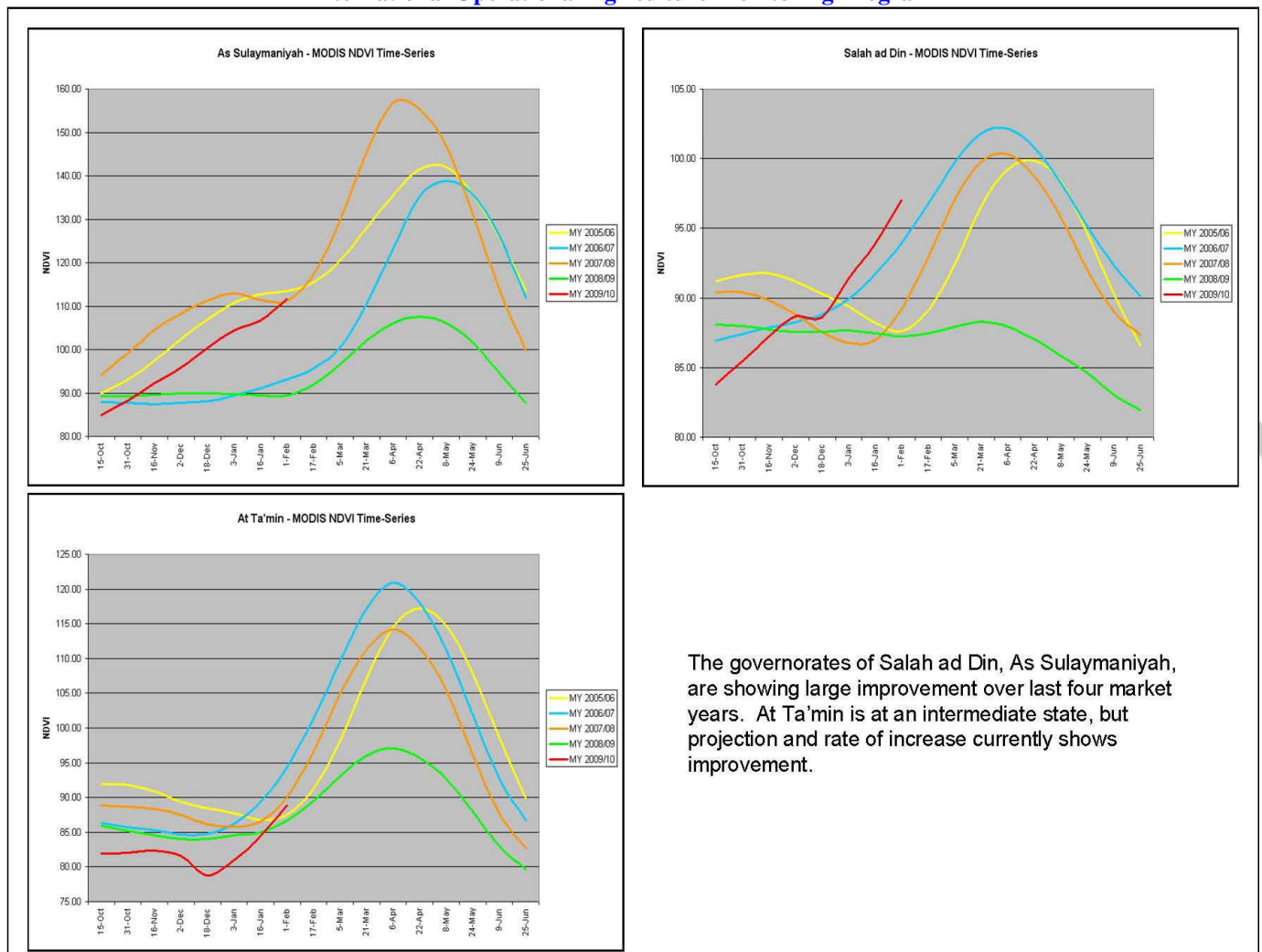


Figure 5: NDVI time-series analysis of the Arbil, Dahuk, and Ninawa.

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The governorates of Salah ad Din, As Sulaymaniyah, are showing large improvement over last four market years. At Ta'min is at an intermediate state, but projection and rate of increase currently shows improvement.

Figure 6: NDVI time-series analysis of the As Sulaymaniyah, Salah ad Din, and At Ta'min.

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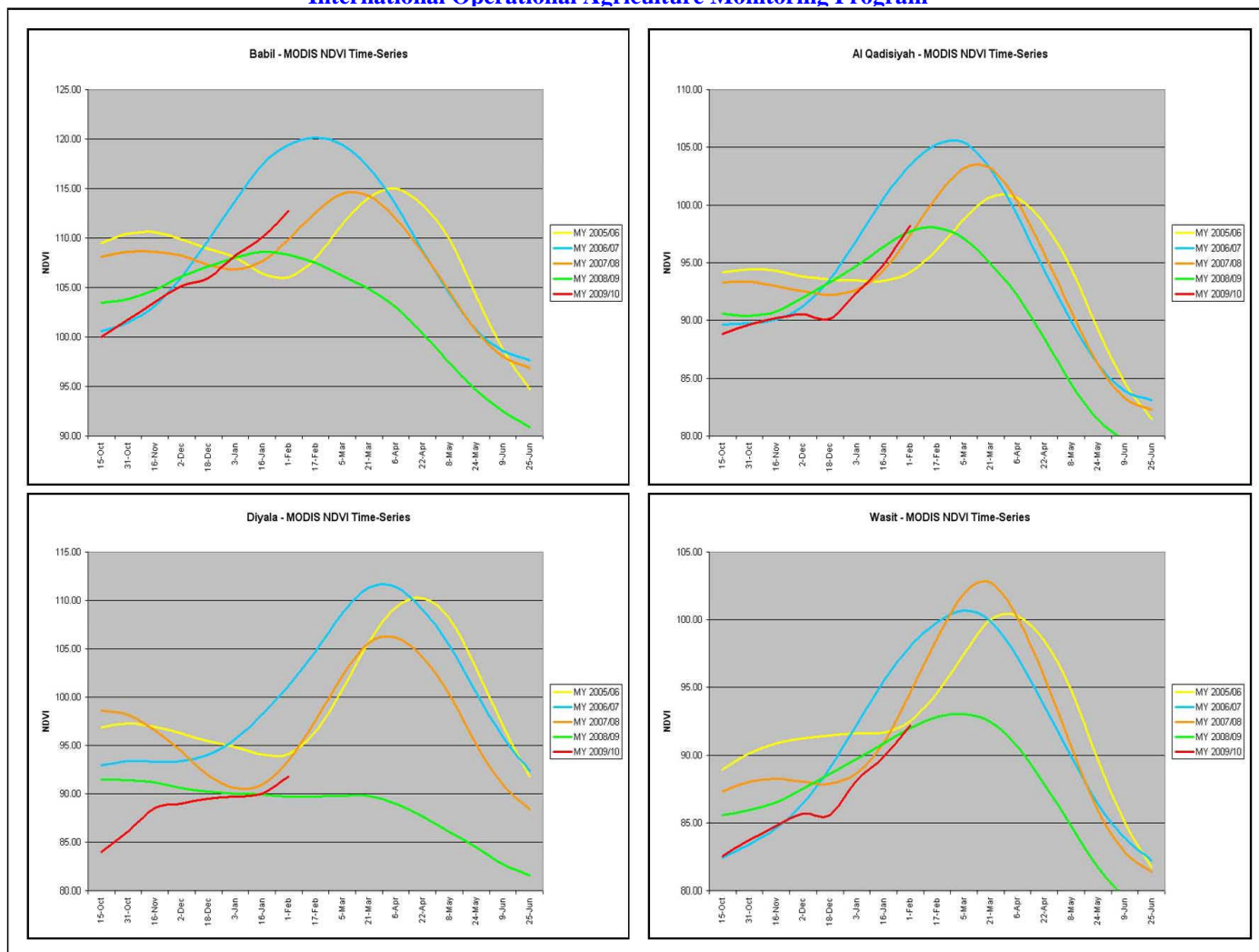


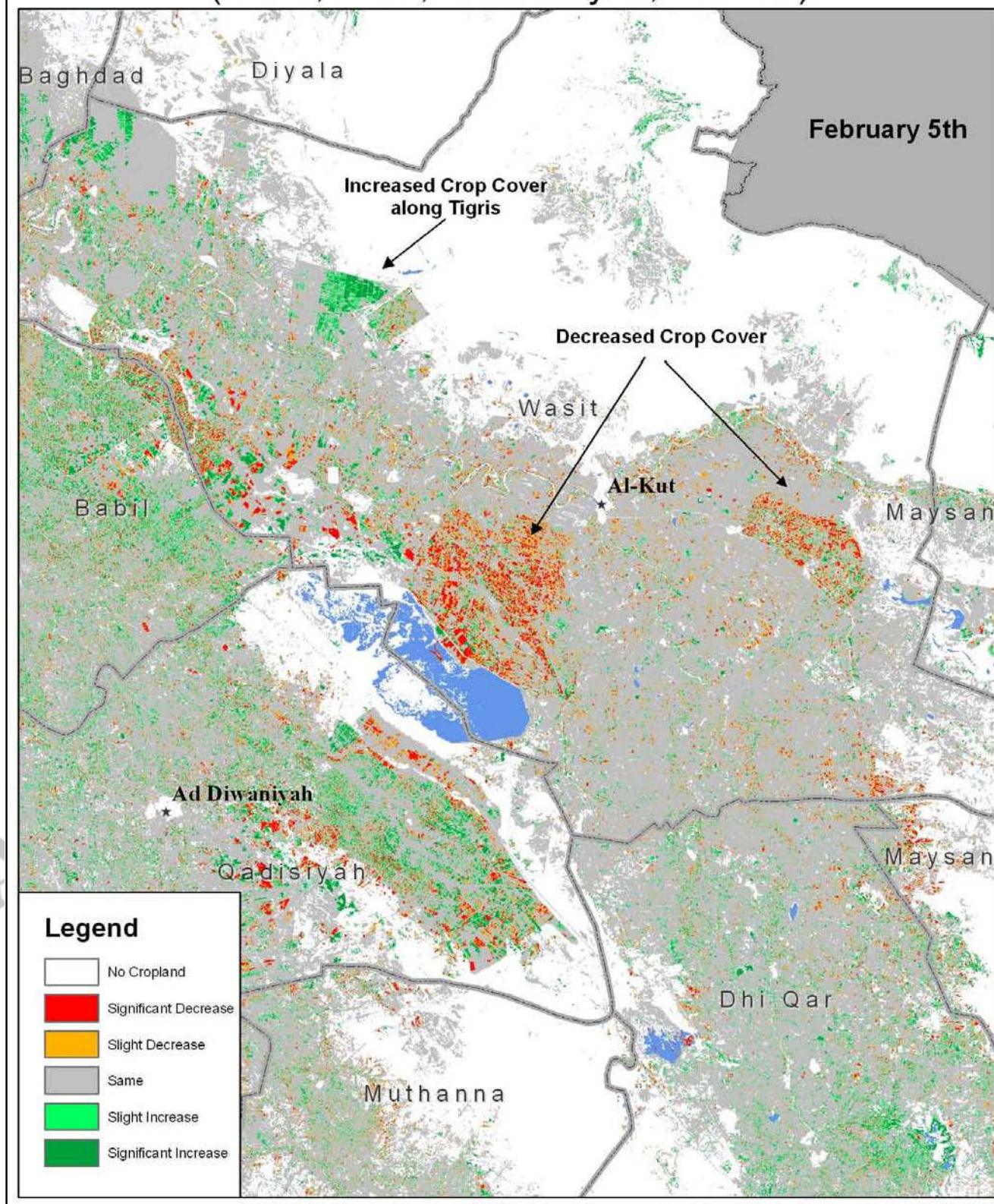
Figure 7: NDVI time-series analysis of the southern irrigated provinces. *Season is too early to obtain accurate data for remaining provinces.

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Figure 8: AWiFS NDVI comparison between February 4th, 2008 and February 5th, 2009.

AWiFS NDVI Change from Previous Season (Wasit, Babil, Al Qadisiyah, Dhi Qar)



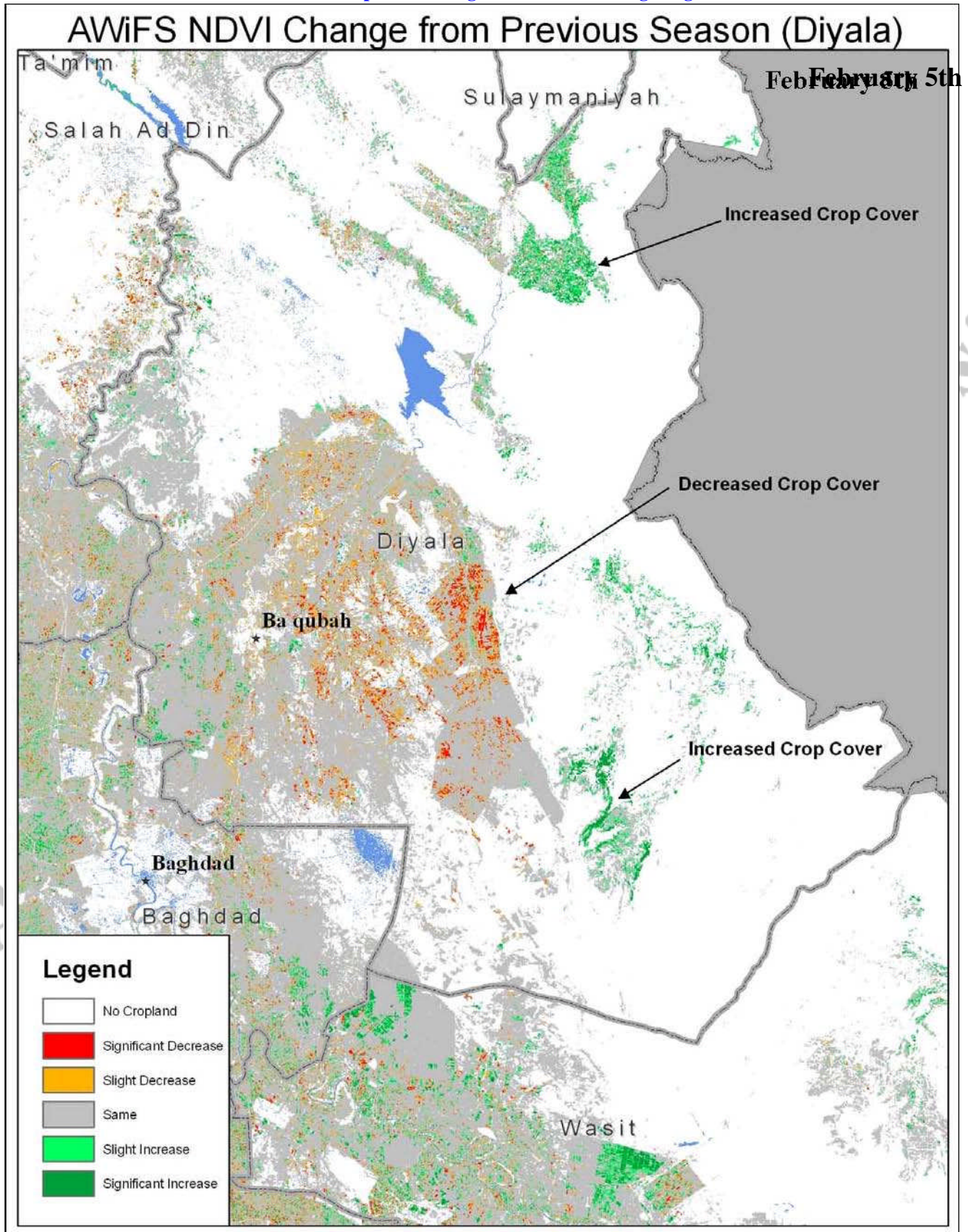
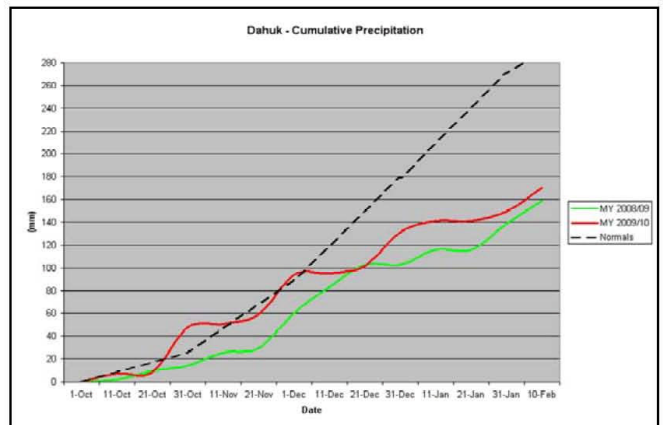
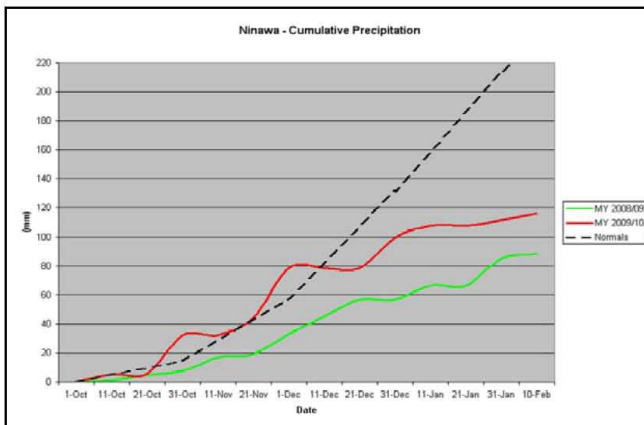
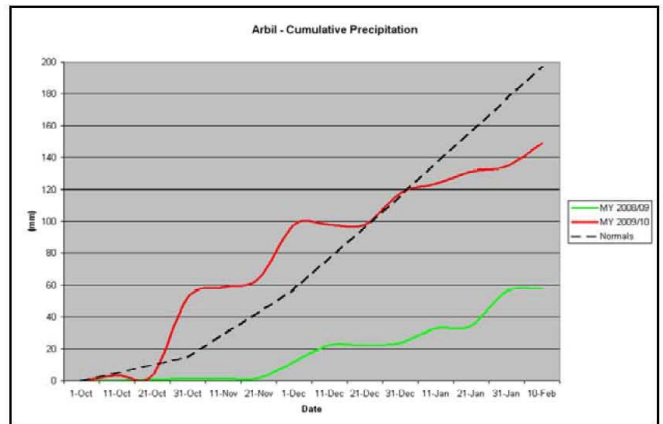
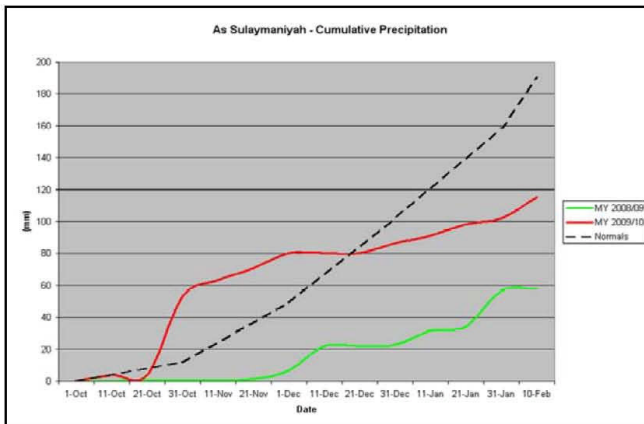
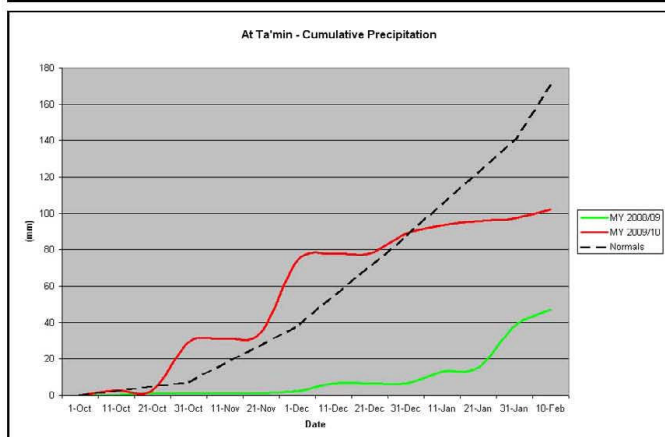
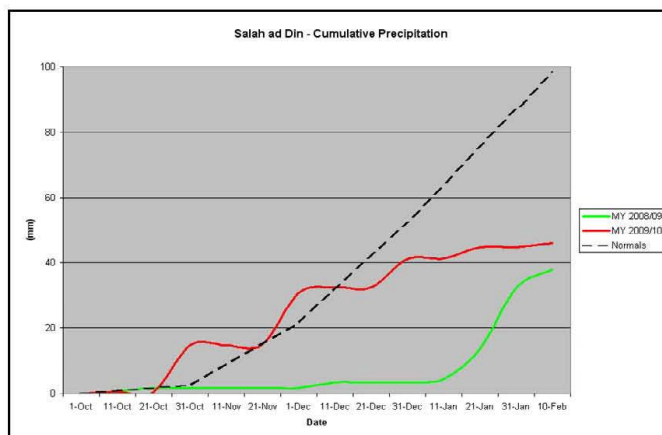
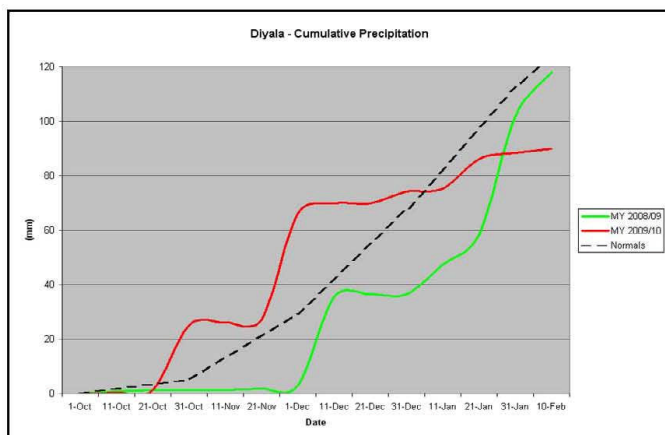


Figure 9: AWiFS NDVI comparison between February 4th, 2008 and February 5th, 2009.

Northern Provinces – Primarily Rainfed

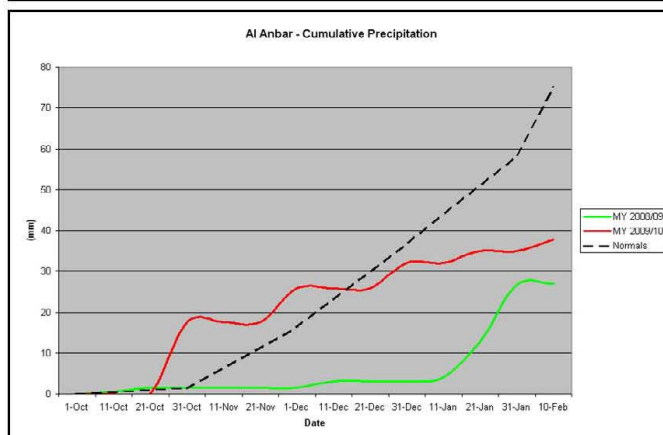
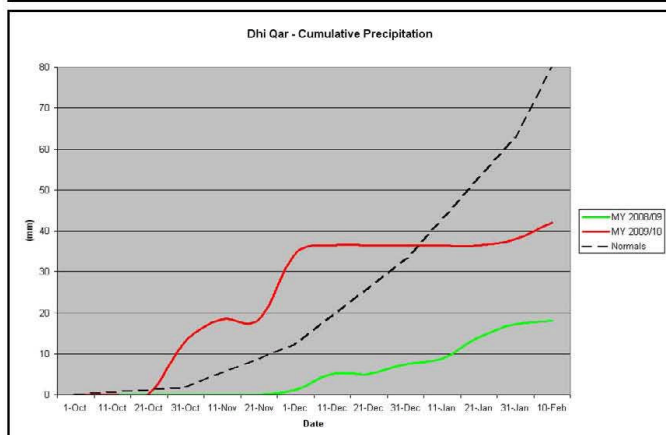
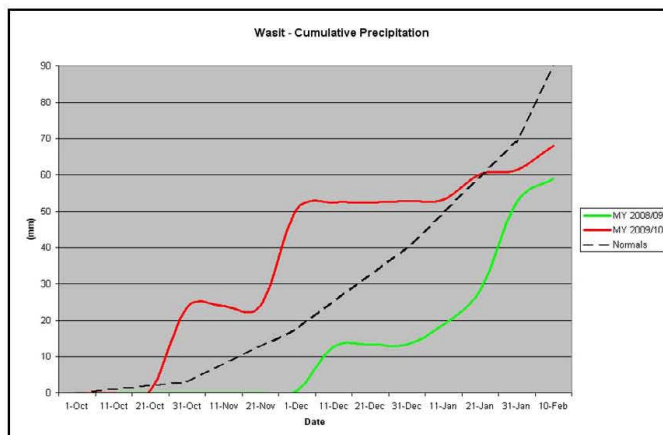
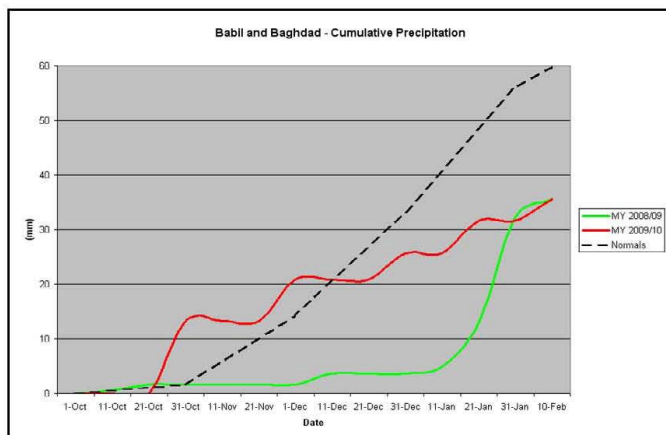


Northern Provinces – Mixed Irrigated & Rainfed



*At Ta'min, Salah ad Din, and Diyala provinces are characterized by mixed rainfed and irrigated cropland

Southern Provinces – Primarily Irrigated



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